AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus, comprising:

a processor to execute a plurality of threads simultaneously, each thread including a series of instructions;

an event detector to detect a predetermined list of events and to transmit an event detection signal to a multiplexer; and

an event selection control register (ESCR) to instruct the multiplexer to select an event from the predetermined list of events by qualifying the event based on a set of conditions, wherein the qualifying of the event is performed using a thread ID and a thread current privilege level (CPL), the thread ID indicating a source of the event, the source including a thread of the plurality of threads where the event occurred;

~~an event counter to count the event qualified by the multiplexer; and~~

~~an access location to allow access to the event counter to determine a current count of the event~~.

2. (Previously Presented) The apparatus of claim 1, wherein the access location allows access to determine the count without disturbing the operation of event counter.

3. (Previously Presented) The apparatus of claim 2, wherein the ESCR comprises a first field of bits to choose the event to be counted.

4. (Previously Presented) The apparatus of claim 3, wherein the ESCR further comprises a second field of bits to choose the event to be masked and not counted.

Claims 5-6 (Cancelled)

7. (Previously Presented) The apparatus of claim 1, wherein the event counter is stopped and cleared before a new event is selected.

8. (Previously Presented) The apparatus of claim 7, wherein the event counter is preset to a certain state.

9. (Previously Presented) The apparatus of claim 1, wherein the predetermined list of events includes hardware performance and breakpoint events.

Claims 10-17 (Cancelled)

18. (Currently Amended) A method, comprising:

executing a plurality of threads simultaneously, each thread including a series of instructions;

detecting a predetermined list of events and transmitting an event detection signal to a multiplexer;

instructing the multiplexer to select an event from the predetermined list of events by qualifying the event based on a set of conditions, wherein the qualifying of the event is performed using a thread ID and a thread CPL, the thread ID indicating a source of the event, the source including a thread of the plurality of threads where the event occurred;

counting the event qualified by the multiplexer using an event counter; and

accessing the event counter to determine a current count of the event.

19. (Cancelled)

20. (Previously Presented) The method in claim 18, wherein the qualifying of the event includes requiring that the event has a preselected thread ID.

21. (Currently Amended) The method in claim 20, wherein the qualifying of the event further includes requiring that the event has a preselected thread ~~current privilege level (CPL)~~ CPL.

Claims 22-26 (Cancelled)

27. (Currently Amended) The ~~apparatus~~ method of claim ~~25,~~ 18, wherein the thread CPL indicates a privilege level at which the thread at which the event occurred was operating when the event occurred.

28. (Previously Presented) The method of claim 20, wherein the preselected thread ID represents a thread of the plurality of threads where the event occurred.

29. (Previously Presented) The method of claim 21, wherein thread CPL indicates a privilege level at which the thread was operating at when the event occurred.

30. (New) The apparatus of claim 1, wherein the thread CPL indicates a privilege level at which the thread at which the event occurred was operating when the event occurred.

31. (New) The apparatus of claim 1, further comprising:

an event counter to count the event qualified by the multiplexer; and

an access location to allow access to the event counter to determine a current count of the event.

32. (New) An system, comprising:

a storage medium coupled with a processor, the processor to execute a plurality of threads simultaneously, each thread including a series of instructions;

an event detector to detect a predetermined list of events and to transmit an event detection signal to a multiplexer;

an event selection control register (ESCR) to instruct the multiplexer to select an event from the predetermined list of events by qualifying the event based on a set of conditions, wherein the qualifying of the event is performed using a thread ID and a thread current privilege level (CPL), the thread ID indicating a source of the event, the source including a thread of the plurality of threads where the event occurred;

an event counter to count the event qualified by the multiplexer; and

an access location to allow access to the event counter to determine a current count of the event.

33. (New) The apparatus of claim 32, wherein the access location allows access to determine the count without disturbing the operation of event counter.

34. (New) The system of claim 33, wherein the ESCR comprises a first field of bits to choose the event to be counted.

35. (New) The system of claim 34, wherein the ESCR further comprises a second field of bits to choose the event to be masked and not counted.

36. (New) The system of claim 32, wherein the event counter is stopped and cleared before a new event is selected.

37. (New) The system of claim 36, wherein the event counter is preset to a certain state.

38. (New) The system of claim 32, wherein the predetermined list of events includes hardware performance and breakpoint events.

39. (New) The system of claim 32, wherein the thread CPL indicates a privilege level at which the thread at which the event occurred was operating when the event occurred.

40. (New) A machine-readable medium having stored thereon data representing sets of instructions, the sets of instructions which, when executed by a machine, cause the machine to:

execute a plurality of threads simultaneously, each thread including a series of instructions;

detect a predetermined list of events and transmitting an event detection signal to a multiplexer;

instruct the multiplexer to select an event from the predetermined list of events by qualifying the event based on a set of conditions, wherein the qualifying of the event is performed using a thread ID and a thread CPL, the thread ID indicating a source of the event, the source including a thread of the plurality of threads where the event occurred;

count the event qualified by the multiplexer using an event counter; and

access the event counter to determine a current count of the event.

41. (New) The machine-readable medium of claim 40, wherein the qualifying of the event includes requiring that the event has a preselected thread ID.

42. (New) The machine-readable medium in claim 41, wherein the qualifying of the event further includes requiring that the event has a preselected thread CPL.

43. (New) The machine-readable medium of claim 40, wherein the thread CPL indicates a privilege level at which the thread at which the event occurred was operating when the event occurred.

44. (New) The machine-readable medium of claim 40, wherein the preselected thread ID represents a thread of the plurality of threads where the event occurred.

45. (New) The machine-readable medium of claim 41, wherein thread CPL indicates a privilege level at which the thread was operating at when the event occurred.